

Springbrook Creek Wetland and Habitat Mitigation Bank Units A and B

USACE IP 200600100

Northwest Region

2015 MONITORING REPORT

Wetlands Program

Issued March 2016



**Washington State
Department of Transportation**

Environmental Services Office

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Springbrook Creek Wetland and Habitat Mitigation Bank Units A and B

USACE IP 200600100



General Site Information	
USACE IP Number	200600100
Mitigation Location	Southwest Renton, King County
Unit A LLID Number	1222271474553
Unit B LLID Number	1222324474518
Monitoring Period	2009-2018
Year of Monitoring	7 of 10

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Summary of Monitoring Results and Management Activities (2015)

Performance Standards	2015 Results ¹	Management Activities
60% cover native woody vegetation in the wetland tree/shrub planting areas (A/B-6)	99% cover (CI _{95%} = 99-100%)	
Remove all Japanese knotweed (<i>Reynoutria japonica</i>), English ivy (<i>Hedera helix</i>), and purple loosestrife (<i>Lythrum salicaria</i>) identified. (A/B-9)	None observed	Weed control in 2015 occurred on 4/1 and 8/11 in Unit A and on 3/31, 4/1, and 8/11 in Unit B.

Report Introduction

This report summarizes seventh-year (Year-7) monitoring activities at Units A and B of the Springbrook Creek Wetland and Habitat Mitigation Bank. Included are a site description, the performance standards, an explanation of monitoring methods, and an evaluation of site development. Monitoring activities included vegetation surveys and photo-documentation on August 3, 2015.

¹ Estimated values are presented with their corresponding statistical confidence interval. For example, 99% cover (CI_{80%} = 99-100%) means we are 95% confident that the true cover value is between 99% and 100%.

What is the Springbrook Creek Wetland and Habitat Mitigation Bank?

This mitigation bank contains reestablished, rehabilitated, and enhanced wetlands as well as enhanced uplands and riparian areas adjacent to Springbrook Creek. Units A and B (Figure 1) encompass 62.2 acres, of which 55.5 acres are pre-existing wetlands. The bank is operated and managed by WSDOT and the City of Renton. The purpose of the bank is to provide compensation for unavoidable impacts to wetlands and other aquatic resources caused by WSDOT highway construction projects and City of Renton mitigation requirements within the service area.

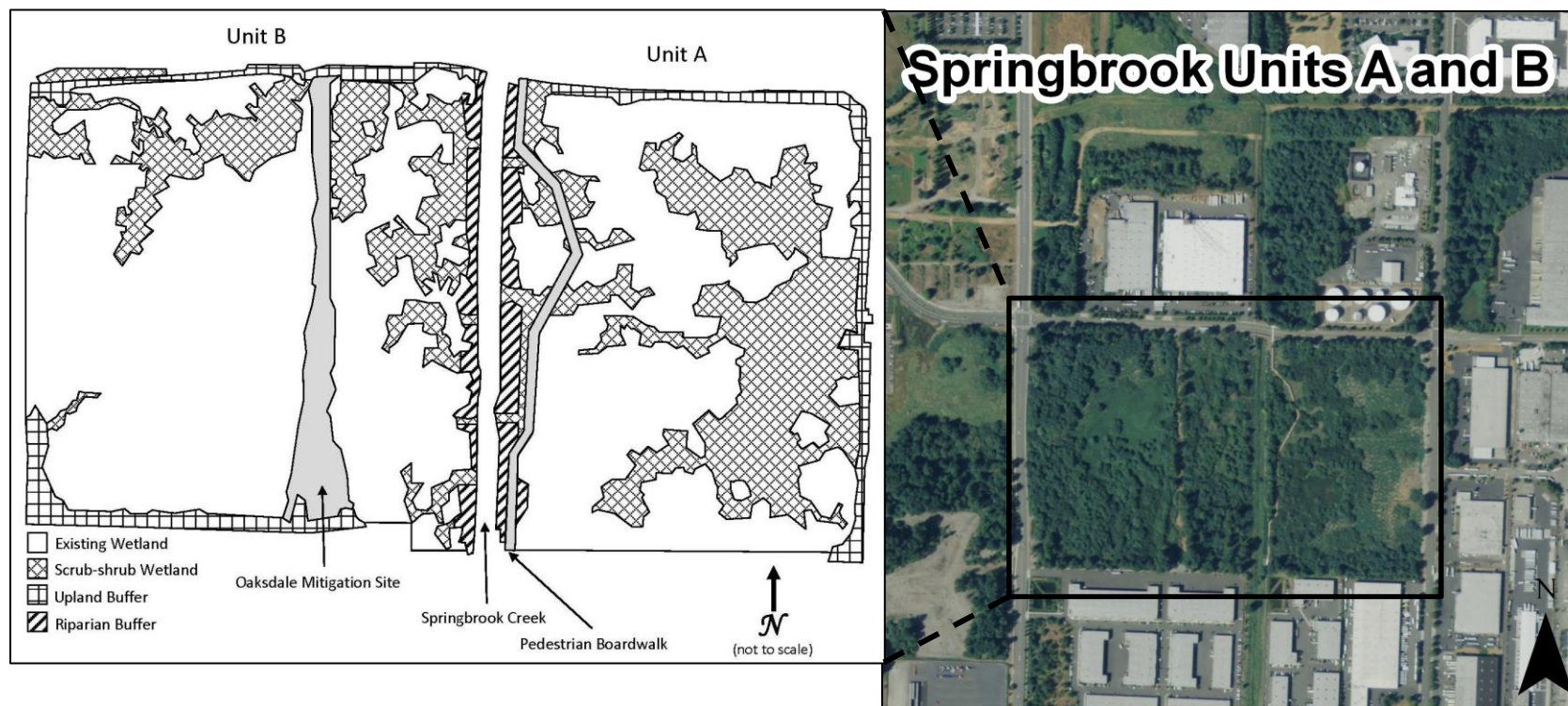


Figure 1 Site Sketch

The Springbrook Creek Wetland and Habitat Mitigation Bank is composed of five separate units, totaling 129.37 acres, which represents some of the last remaining large tracts of undeveloped land in the Green River Basin. All five units are located in the southwestern portion of the City of Renton, King County, Washington.

What are the performance standards for this site?

Year 7

Performance Standard 1 (A/B-6)

In Year 7, native woody vegetation within the wetland tree/shrub planting areas will provide at least 60 percent aerial cover.

Performance Standard 2 (A/B-9)

In Years 1 through 10, remove all Japanese knotweed, English Ivy, and purple loosestrife identified within Units A and B.

Appendix 1 shows the as-built planting plan (WSDOT 2009).

How were the performance standards evaluated?

The tables below document the sampling methodology utilized for all of the performance standards (PS) as required by the mitigation plan. For additional details on the methods see the [WSDOT Wetland Mitigation Site Monitoring Methods Paper](#) (WSDOT 2008).

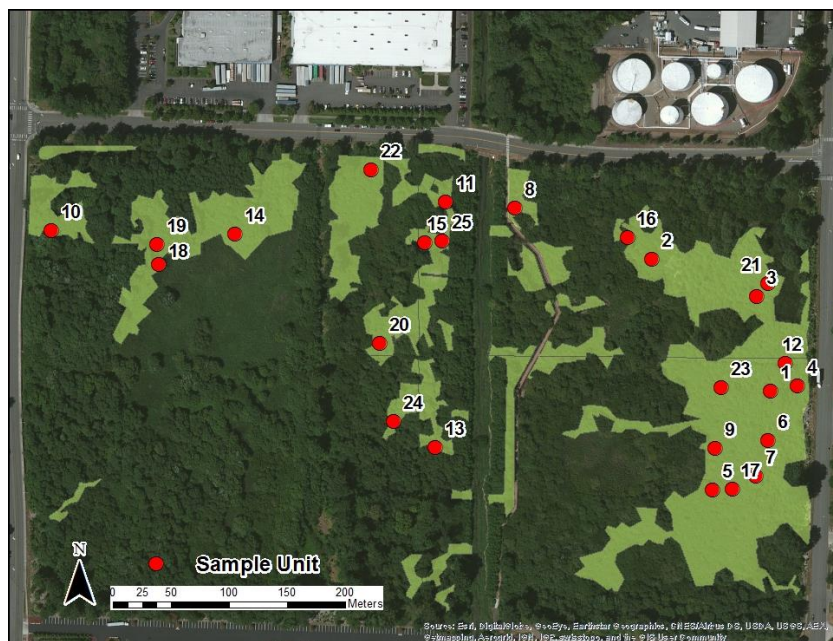


Figure 2 Site Sampling Design (2015)

Placement of Baseline: A baseline was established around the perimeter of the site and parallel to both banks of Springbrook Creek (Figure 2). Transects were randomly placed perpendicular to the baselines. Length 1,247m Transects 1-25

	PS 1	PS 2
Attribute	Cover	Presence
Target pop.	Native Woody	Japanese knotweed, English Ivy, and Purple Loosestrife
Zone	Wetland Tree/Shrub Planting Areas	Entire Site
Sample method	Line-Intercept	Qualitative
SU length	10m	NA
SU width	NA	NA
Points per SU	NA	NA
Total # of SU	25	NA

How is the site developing?

The development of Units A and B of the Springbrook Mitigation Bank continues to progress very well. All current (Year 7) performance standards are being met. The planted willow (*Salix* species) communities remain extremely dense in almost all areas. Four species of birds and a garter snake were observed during vegetation monitoring.

Results for Performance Standard 1 (A/B-6)

(60% cover native woody vegetation in the wetland tree/shrub planting areas):

Cover of native woody vegetation in the wetland tree/shrub planting areas is estimated at 99 percent ($CI_{95\%} = 99-100\%$). This value exceeds the performance standard target. Dominant species are willows. (Photo 1)

Results for Performance Standard 2 (A/B-9)

(Remove all Japanese knotweed, English Ivy, and purple loosestrife identified):

No Japanese knotweed, English Ivy, or purple loosestrife observed at the time of monitoring.



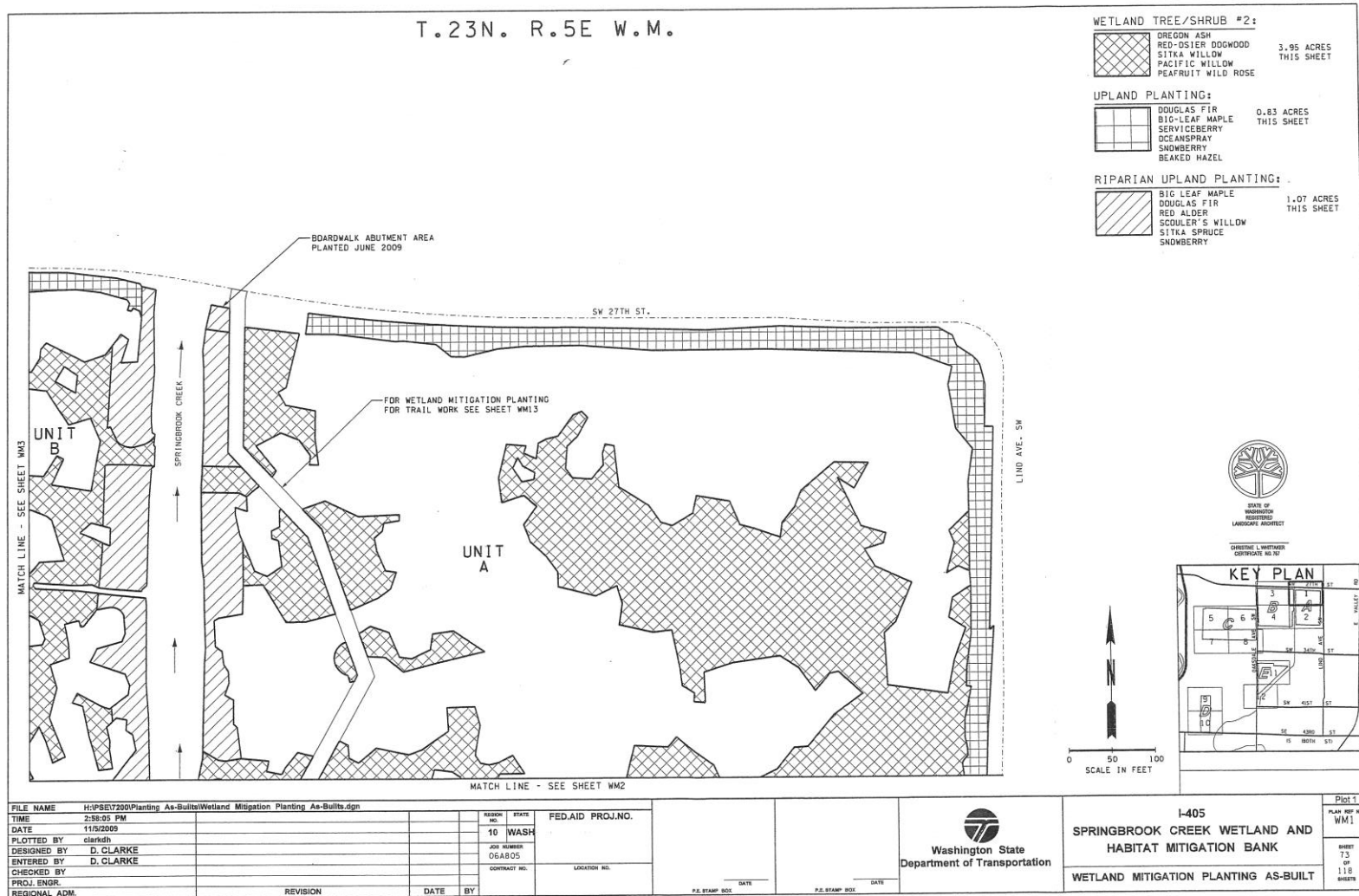
Photo 1
Native woody cover in the wetland tree/shrub planting area (August 2015)

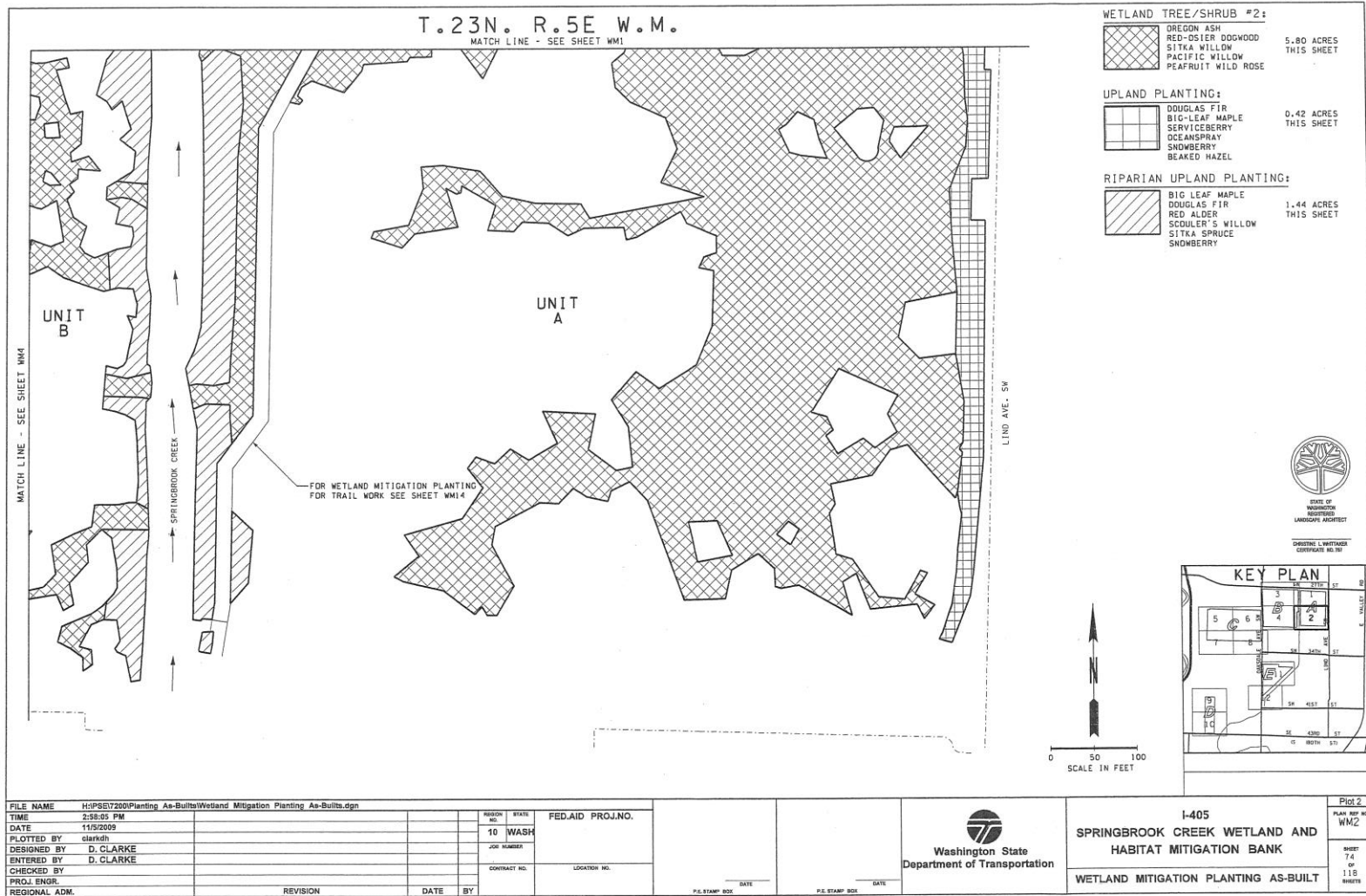
What is planned for this site?

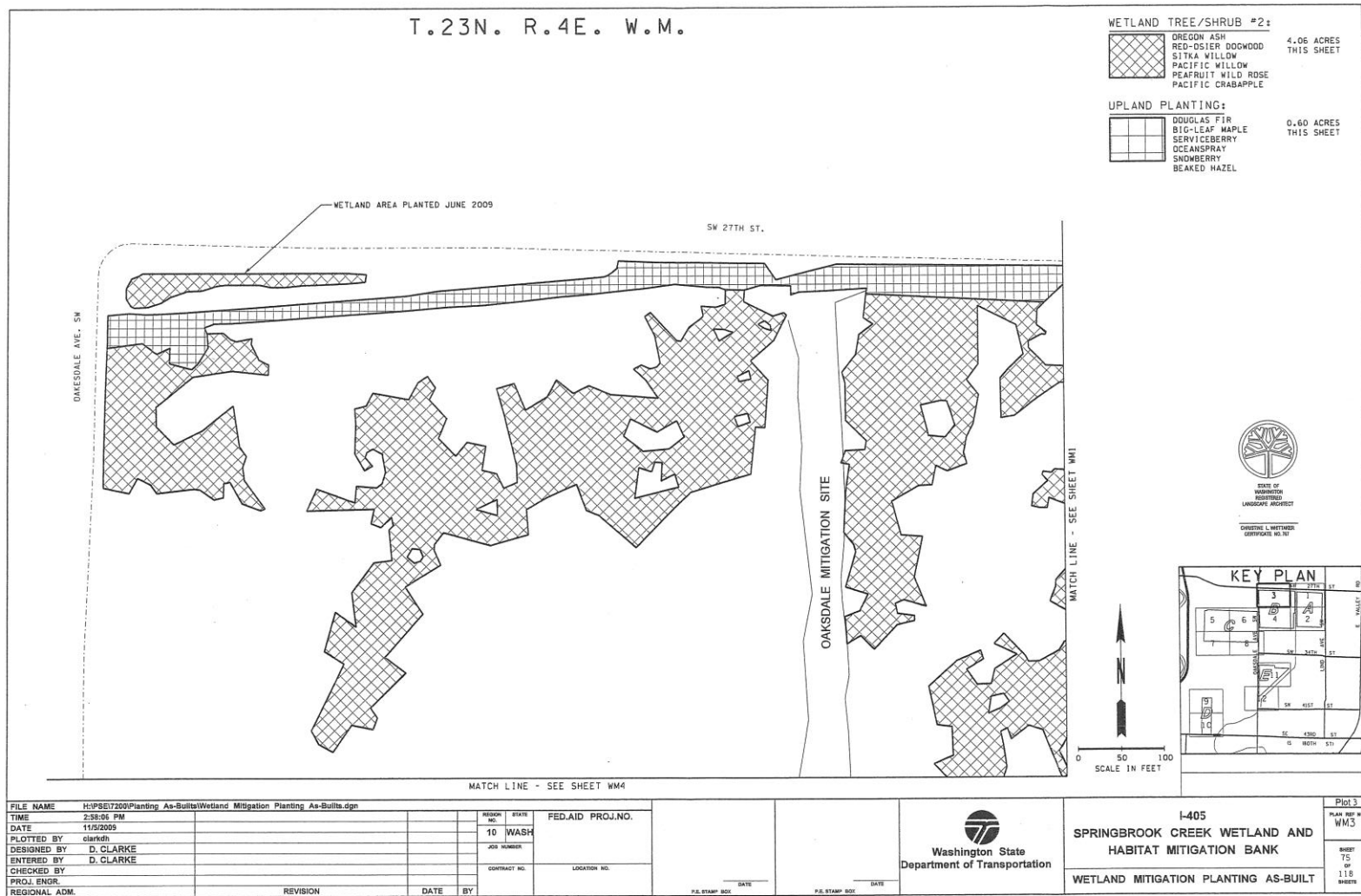
Routine weed control will continue in 2016.

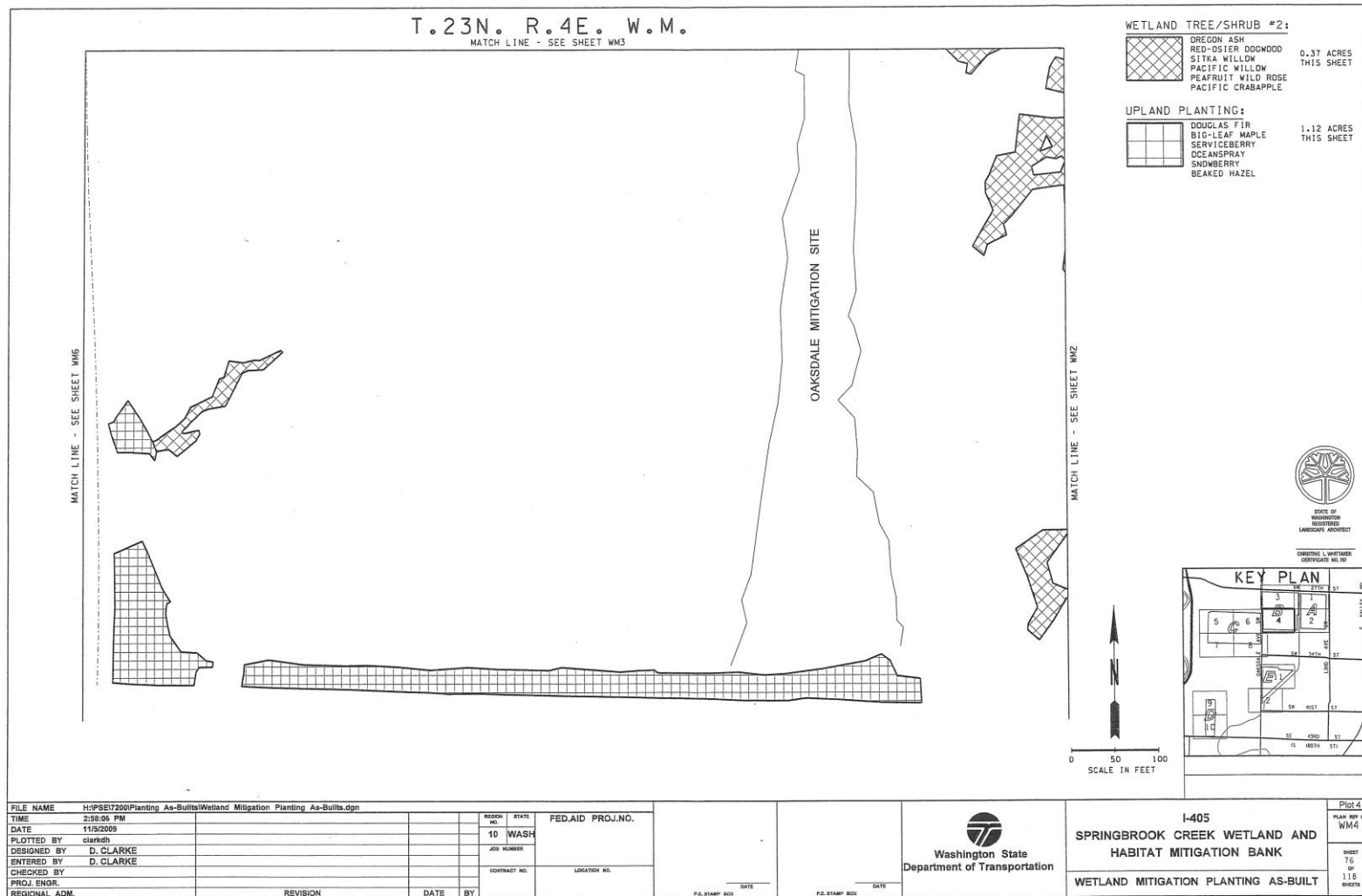
Appendix 1 – As-Built Planting Plan

(from WSDOT 2009)









Appendix 2 – Photo Points

The photographs below were taken from permanent photo-points on August 4, 2015 and document current site development.

Photo Points - Springbrook Units A & B





Photo Point 1a



Photo Point 1b



Photo Point 2a



Photo Point 2b

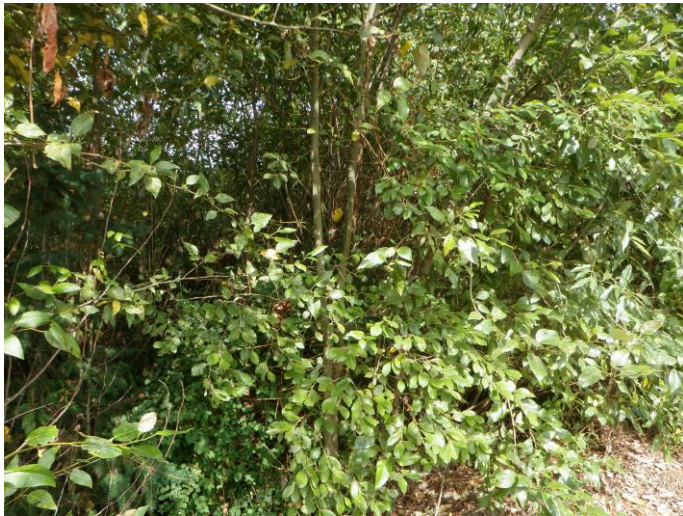


Photo Point 2c



Photo Point 3



Photo Point 4



Photo Point 5



Photo Point 6a



Photo Point 6b



Photo Point 7



Photo Point 8



Photo Point 9



Photo Point 10a



Photo Point 10b



Photo Point 11a



Photo Point 11b



Photo Point 12a



Photo Point 12b



Photo Point 13



Photo Point 14



Photo Point 15

Literature Cited

1. [USACE] US Army Corps of Engineers. 2006. Department of the Army Individual Permit Number 200600100.
2. [WSDOT] Washington State Department of Transportation. 2006. Springbrook Creek Wetland and Habitat Mitigation Bank Instrument. I-405 Corridor Program.
3. [WSDOT] Washington State Department of Transportation. 2009. I-405 Springbrook Creek Wetland and Habitat Mitigation Bank Unit D As-Built Report.
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